

PROJECT DESCRIPTION

THIS PROJECT INVOLVES THE INSTALLATION OF PEDESTRIAN SIGNALS ON THE SOUTH, EAST AND WEST LEGS OF THE INTERSECTION OF MD 4 (PENNSYLVANIA AVENUE) AT BROOKS DRIVE, THE INSTALLATION OF A CROSSWALK AND HANDICAP RAMPS ON THE WEST LEG OF THE INTERSECTION, AND THE INSTALLATION OF SCHOOL ZONE CROSSING SIGNS. MD 4 (PENNSYLVANIA AVENUE) IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

INTERSECTION OPERATION

THE EXISTING TWELVE-PHASE FULLY ACTUATED NEMA CONTROLLER WILL BE USED. THIS INTERSECTION WILL OPERATE IN A NEMA SIX (6) PHASE FULL-TRAFFIC-ACTUATED MODE. EXCLUSIVE LEFT TURN PHASES ARE PROVIDED ON NORTHBOUND AND SOUTHBOUND MD 4. THE EASTBOUND AND WESTBOUND MOVEMENTS WILL OPERATE SEPARATELY. AN ALTERNATE PEDESTRIAN PHASE WILL BE PROVIDED ACROSS THE SOUTH APPROACH OF THE INTERSECTION. CONCURRENT PEDESTRIAN PHASES WILL BE PROVIDED ACROSS THE EAST AND WEST APPROACHES.

MAINTENANCE OF TRAFFIC

THE FOLLOWING WORK ZONE TRAFFIC CONTROL STANDARDS SHALL BE USED FOR THIS PROJECT.

STANDARD NO. 104.00
STANDARD NO. 104.44-01 (LEFT LANE CLOSURE)
STANDARD NO. 104.45-01 (RIGHT LANE CLOSURE)
STANDARD NO. 104.48-01 (INTERSECTION (LEFT LANE/TURN BAY CLOSURE))
STANDARD NO. 104.49-01 (SHOULDER WORK)

PROJECT CONTACTS

MR. MAJIB SHAKIB
ASSISTANT DISTRICT ENGINEER - TRAFFIC
301-513-7358

MR. RICHARD DAFF
CHIEF, TRAFFIC OPERATIONS DIVISION
410-787-7630

MR. RALEIGH MEDLEY
ASSISTANT DISTRICT ENGINEER - MAINTENANCE
301-513-7304

MR. ROBERT SNYDER
ASSISTANT DIVISION CHIEF, TRAFFIC OPERATIONS DIVISION
410-787-7631

MR. AUGUSTINE REBISH
ASSISTANT DISTRICT ENGINEER - UTILITY
301-513-7350

MR. EDWARD RODENHIZER
CHIEF, SIGNAL OPERATIONS SECTION
410-787-7652

THE POWER COMPANY REPRESENTATIVE IS:

POTOMAC ELECTRIC POWER COMPANY
MR. RICHARD CHILCOAT
301-931-2872

EQUIPMENT LIST

A. EQUIPMENT TO BE FURNISHED BY THE ADMINISTRATION

ITEM	QUANTITY	UNITS	DESCRIPTION
9001	144	SF	FLAT SHEET ALUMINUM SIGNS CONSISTING OF: - 6 EACH SI-1 (36"X36"), FYG - GROUND MOUNT - 4 EACH WI-6-7 (21"X15"), FYG - GROUND MOUNT - 2 EACH S4-4(3) (30"X12"), FYG - GROUND MOUNT - 1 EACH RI-2 (36"X36"X36") - GROUND MOUNT - 1 EACH ASSOCIATED SHIELD ASSEMBLY (48"X75") - BAND TO POLE - 1 EACH ASSOCIATED SHIELD ASSEMBLY (48"X75") - GROUND MOUNT - 2 EACH ASSOCIATED SHIELD ASSEMBLY (30"X51") - GROUND MOUNT

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR

ITEM	QUANTITY	UNITS	DESCRIPTION
1001	1	EA	MAINTENANCE OF TRAFFIC
2001	5	CY	CLASS 2 EXCAVATION
2002	2	CY	TEST PIT EXCAVATION
5003	250	LF	12 INCH WHITE LEAD FREE REFLECTIVE THERMOPLASTIC PAVEMENT MARKINGS
5004	30	LF	24 INCH WHITE LEAD FREE REFLECTIVE THERMOPLASTIC PAVEMENT MARKINGS
5005	30	LF	REMOVAL OF EXISTING PERMANENT PAVEMENT LINE MARKINGS - ANY WIDTH
NEG.	15	LF	STANDARD TYPE C COMBINATION CURB AND GUTTER 12 INCH GUTTER PAN 8 INCH DEPTH
6002	8	LF	MONOLITHIC CONCRETE MEDIAN 4 FEET 0 INCH WIDE TYPE A-1
6003	140	SF	4 INCH CONCRETE SIDEWALK
NEG.	1	EA	FURNISH AND INSTALL ACCESS HOLE COVER ON SIGNAL POLE
8001	12	EA	12 INCH PEDESTRIAN SIGNAL HEAD
8009	4	EA	BREAKAWAY PEDESTAL POLE (ANY SIZE)
8010	1	EA	CONDUIT BEND IN EXISTING BASE
8011	2	EA	PUSHBUTTON AND SIGN
8021	4	CY	CONCRETE FOR SIGNAL FOUNDATION
8022	120	LF	WOOD SIGN SUPPORTS 4 INCH X 4 INCH
NEG.	15	LF	WOOD SIGN SUPPORTS 4 INCH X 6 INCH
8023	260	LF	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
8028	120	LF	4 INCH SCHEDULE 80 RIGID PVC CONDUIT-BORED
8029	50	LF	3 INCH SCHEDULE 80 RIGID PVC CONDUIT-TRENCHED
8034	10	LF	1 INCH LIQUID TIGHT FLEXIBLE NON-METALLIC CONDUIT FOR DETECTOR SLEEVE
8041	3	EA	FURNISH AND INSTALL ELECTRICAL HANDHOLE
NEG.	20	LF	WOOD SIGN SUPPORT 6 INCH X 8 INCH
NEG.	1	EA	BAND SIGN TO SIGN SUPPORT
8042	133	SF	INSTALL GROUND MOUNTED SIGN
8050	4	EA	GROUND ROD - 3/4 INCH DIAMETER X 10 FOOT LENGTH
8056	1000	LF	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 AWG)
8057	620	LF	ELECTRICAL CABLE - 3 CONDUCTOR (NO. 14 AWG)
8058	350	LF	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)
8060	950	LF	LOOP WIRE ENCASED IN FLEXIBLE TUBING (NO. 14 AWG)
8061	230	LF	SAW CUT FOR SIGNAL (LOOP DETECTOR)

C. EQUIPMENT TO BE REMOVED BY THE CONTRACTOR

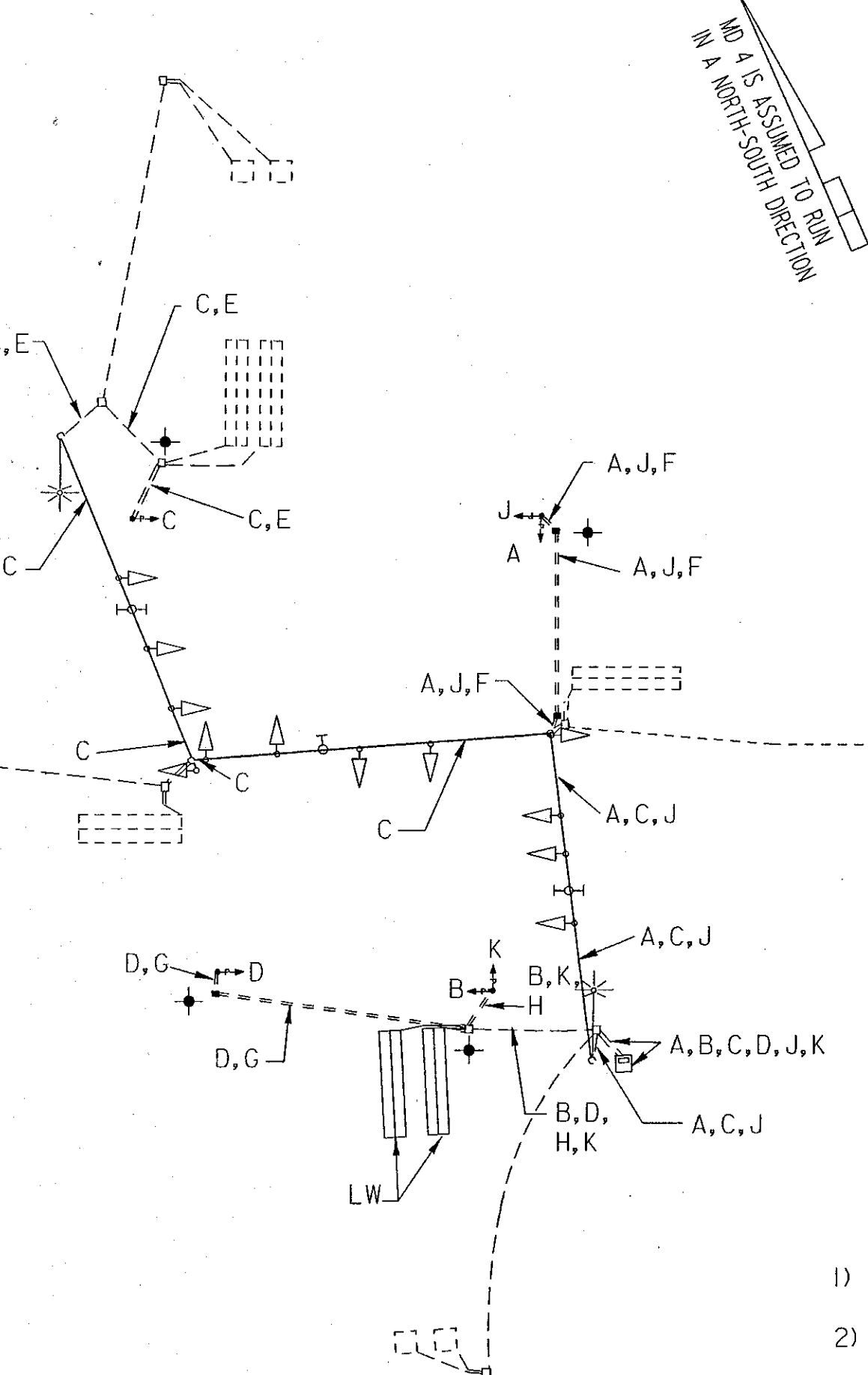
NO EQUIPMENT TO BE RETURNED TO THE SHA.

PHASE CHART

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18

PHASE 1 & 5	<G-	<G-	R	R	<G-	<G-	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW
1 & 5 CHANGE	THE CONTROLLER MAY SKIP TO PHASES 1 & 6 OR 2 & 5 OR 2 & 6																	
PHASE 1 & 6	<G-	<G-	G	G	<R-	<R-	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW
1 & 6 CHANGE	<Y-	<Y-	Y	Y	<R-	<R-	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW
PHASE 2 & 5	<R-	<R-	R	R	<G-	<G-	G	G	R	R	R	R	DW	DW	DW	DW	DW	DW
2 & 5 CHANGE	<R-	<R-	R	R	<Y-	<Y-	Y	Y	R	R	R	R	DW	DW	DW	DW	DW	DW
PHASE 2 & 6	<R-	<R-	G	G	<R-	<R-	G	G	R	R	R	R	W	W	W	W	DW	DW
PED CLEAR	<R-	<R-	G	G	<R-	<R-	G	G	R	R	R	R	FL/DW	FL/DW	FL/DW	FL/DW	DW	DW
2 & 6 CHANGE	<R-	<R-	Y	Y	<R-	<R-	Y	Y	R	R	R	R	DW	DW	DW	DW	DW	DW
PHASE 3	<R-	<R-	R	R	<R-	<R-	R	R	R	R	<G- G	G	DW	DW	DW	DW	DW	DW
3 CHANGE	<R-	<R-	R	R	<R-	<R-	R	R	R	R	Y	Y	DW	DW	DW	DW	DW	DW
PHASE 4	<R-	<R-	R	R	<R-	<R-	R	R	<G- G	G	R	R	DW	DW	DW	DW	DW	DW
4 CHANGE	<R-	<R-	R	R	<R-	<R-	R	R	Y	Y	R	R	DW	DW	DW	DW	DW	DW
ALT. 4	<R-	<R-	R	R	<R-	<R-	R	R	<G- G	G	R	R	DW	DW	DW	DW	W	W
PED. CLEAR	<R-	<R-	R	R	<R-	<R-	R	R	<G- G	G	R	R	DW	DW	DW	DW	FL/DW	FL/DW
ALT. 4 CHANGE	<R-	<R-	R	R	<R-	<R-	R	R	Y	Y	R	R	DW	DW	DW	DW	DW	DW
FLASHING OPERATION	FL/ <R-	FL/ <R-	FL/ Y	FL/ Y	FL/ <R-	FL/ <R-	FL/ Y	FL/ Y	FL/ R	FL/ R	FL/ R	FL/ R	DARK	DARK	DARK	DARK	DARK	DARK

WIRING DIAGRAM

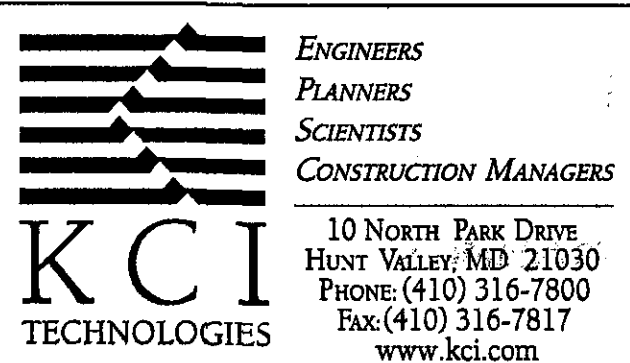


WIRING LEGEND

- A,B 1 2-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
C,D 1 3-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
J,K 1 5-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
E,F,G,H 1 STRANDED BARE COPPER GROUND WIRE (NO. 6 A.W.G.)
LW 1 LOOP WIRE
+ GROUND ROD

WIRING NOTES:

- EXISTING WIRING NOT DETAILED SHALL REMAIN IN PLACE.
- CONNECT THE PROPOSED STRANDED BARE COPPER GROUND WIRE TO THE EXISTING GROUND SYSTEM, AS DIRECTED BY THE ENGINEER.



MARYLAND DOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION
MD 4 (PENNSYLVANIA AVENUE) AT
BROOKS DRIVE
DISTRICT HEIGHTS, MARYLAND
GENERAL INFORMATION SHEET

DRAWN BY: A.M.H.	F.A.P. NO. AC-STPG-0005(857)E	TS NO. 963C-GI	SHEET NO. 2 OF 2
CHECKED BY: J.F.L.	S.H.A. NO. PG484A56	T.I.M.S. NO. F676	
SCALE: NONE	COUNTY: PRINCE GEORGE'S		
DATE: 5/2003	LOG MILE: 16000412.60		